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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,377	10/07/2003	Peng Lee	026018.46631	5920

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EXAMINER

PHAM, TOAN NGOC

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/680,377

Applicant(s)

LEE, PENG

Examiner

Toan N. Pham

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-13; 20-25; 33 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-19 and 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/22/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hickling et al. (US 5,616,845).

Regarding claim 14: Hickling et al. discloses an acoustic sensor for insect detection comprising the detection member with proximal and distal end with a diaphragm contacting the proximal end and the distal end is inserted into the infestation site; amplifying the sound produced by the diaphragm and converting the sound to electrical signal (col. 4, lines 61-67; col. 5, lines 3-37; col. 6, lines 39-51).

Regarding claim 17: Hickling et al. discloses the signal is transmitted to a controller (col. 10, lines 15-20).

Regarding claim 18: Hickling et al. discloses the low noise amplifier (col. 8, lines 1-6).

Regarding claim 19: Hickling et al. discloses the band pass filter (col. 8, lines 18-24).

Regarding claim 26: Hickling et al. discloses using acoustic sensors to detect termites in a structure; and transmitting data collected by the sensors to a central

operation center for inclusion in a central database of termite data and information (col. 10; lines 14-36).

Regarding claim 27: Hickling et al. discloses affixing the acoustic sensor to a structure; communicating the signals from the sensor to a computing device; comparing the detected signals with the control signals; and detecting insect infestation if the detector signal is similar to the control signals (col. 4, lines 61-67; col. 5, lines 3-37; col. 6, lines 39-51; col. 10, lines 14-36).

Regarding claim 29: Hickling et al. discloses the computing device is the central processor (col. 10, lines 14-36).

Regarding claim 31: Hickling et al. discloses the insects are termites (col. 3, lines 21-36).

Regarding claim 32: Hickling et al. discloses the control signal stored in the computing device (col. 10, lines 14-36).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 16, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hickling et al. (US 5,616,845) in view of Betts (US 4,991,439).

Regarding claim 15: Hickling et al. does not disclose the detection member is a spike. Betts discloses the detection member is a spike (16) permanently attached to the sensor (col. 3, lines 49-55). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a spike as taught by Betts in a system as disclosed by Hickling et al. for providing additional and different methods of detecting the infested structure.

Regarding claim 16: Betts discloses the detection member is a probe (16) (col. 3, lines 49-55). Betts does not disclose that the probe is reversibly attached to the sensor; however, it is merely a matter of design choice to provide different attachment method of the probe.

Regarding claim 28: Betts discloses detecting the vibration signals (col. 3, lines 49-55). Betts does not disclose the signals are between 0.5 and three milliseconds in length; however, it is merely a matter of design choice to utilize different signal lengths of the detected signal.

Regarding claim 30: Betts discloses the computing device is a hand held (12) process (col. 3, lines 49-55; Fig. 1).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of Litzkow et al. (US 4,937,555), Donskoy et al. (US 6,801,131), Dunegan (US 6,883,375), Pallaske (US 4,941,356), Su (US 6,052,066),

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Oguchi (US 6,166,641); Vick et al. (US 5,473,942) and Otomo (US 5,877,422) are cited to show a variety of termite detection systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan N. Pham whose telephone number is (571) 272-2967. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 1, 2006

**TOAN N. PHAM**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Toan N. Pham', written in a cursive style.